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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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45507	7590	11/17/2008		
BAKER BOTTS LLP 2001 ROSS AVENUE 6TH FLOOR DALLAS, TX 75201-2980			EXAMINER GOODCHILD, WILLIAM J	
			ART UNIT 2445	PAPER NUMBER
			NOTIFICATION DATE 11/17/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/824,873	Applicant(s) DAVIDSON, SHANNON V.	
	Examiner WILLIAM J. GOODCHILD	Art Unit 2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/14/2007, 01/09/2008, 01/30/2008, 03/14/2008,</u> | 6) <input type="checkbox"/> Other: _____ |
| <u>03/26/2008, 10/01/2008</u> | |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. The term "at least some" in claims 1-27 is a relative term which renders the claim indefinite. The term "at least some" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear how to define "at least some" within the metes and bounds of the claim. Dependent claims are rejected for being dependent on a rejected independent claim and / or for also having the term "at least some".

3. Claims 25-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitations "a first switch integrated to the first card, the first processors communicably coupled to the first switch, the first switch operable to communicably couple the first processors to six or more second cards each comprising at least two second processors integrated to the second card and a second switch integrated to the second card operable to communicably couple the second

Art Unit: 2445

processors to the first card and at least five third cards each comprising at least two third processors integrated to the third card and a third switch integrated to the third card; the first processors being operable to communicate with particular second processors on a particular second card via the first switch and the second switch on the particular second card; the first processors being operable to communicate with particular third processors on a particular third card via the first switch, a particular second switch on a particular second card between the first card and the particular third card, and the third switch on the particular third card without communicating via either second processor on the particular second card”, are not supported within the specification.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 7-11, 14-18, 21 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Haynes et al., (“A visualization tool for analyzing cluster performance data”, Proceedings of 2001 IEEE International Conference on Cluster Computing, 2001), (hereinafter Haynes).

Art Unit: 2445

Regarding claims 1, 8 and 15, Haynes discloses collecting dynamic status information on each of at least a subset of a plurality of nodes [sections 1, lines 15-18, figures 1-2, section 4, lines 18-36, updates, although not in real time, are constantly being made], each node comprising a switching fabric integrated to a card and at least two processors integrated to the card [section 3]; generating a plurality of graphical elements that convey at least some of the dynamic status information [figure 2]; and communicating at least some of the graphical elements for presentation to a user [figure 2].

Regarding claims 2, 9 and 16, Haynes further discloses wherein dynamic status information on a node indicates a physical status of the node [figure 2, section 3, lines 44-65].

Regarding claims 3, 10 and 17, Haynes further discloses wherein the physical status of the node comprises one or more of processor utilization; memory utilization; physical location; IP address; or bandwidth [figure 2, section 3, lines 44-65].

Regarding claims 4, 11 and 18, Haynes further discloses wherein at least some of the graphical elements collectively enable a view of a topology of at least the subset of the nodes, the switching fabrics of the nodes enabling the topology [figure 2, section 3, lines 9-15].

Regarding claims 7, 14 and 21, Haynes further discloses receiving a notification of a failure of one of the nodes [section 6, lines 32-48]; and updating the view of the topology based on the notification [section 5, lines 88-97].

Regarding claims 22-24, Haynes further discloses wherein each card is a motherboard [Haynes, section 3, it is inherent that processors of a computer or network node are connected to motherboards].

Regarding claims 25-27, Haynes further discloses at least two first processors integrated to a first card and operable to communicate with each other via a direct link between them [Haynes, section 3 and figure 1]; and a first switch integrated to the first card, the first processors communicably coupled to the first switch, the first switch operable to communicably couple the first processors to six or more second cards each comprising at least two second processors integrated to the second card and a second switch integrated to the second card operable to communicably couple the second processors to the first card and at least five third cards each comprising at least two third processors integrated to the third card and a third switch integrated to the third card; the first processors being operable to communicate with particular second processors on a particular second card via the first switch and the second switch on the particular second card [Haynes, section 3 and figure 1];

Art Unit: 2445

the first processors being operable to communicate with particular third processors on a particular third card via the first switch, a particular second switch on a particular second card between the first card and the particular third card, and the third switch on the particular third card without communicating via either second processor on the particular second card [Haynes, section 3 and figure 1]; and

a client operable to: collect dynamic status information on each of at least a subset of the nodes [Haynes, section 3 and figure 1];

generate a plurality of graphical elements that convey at least some of the dynamic status information [Haynes, section 3 and figure 1]; and

communicate at least some of the graphical elements for presentation to a user [Haynes, section 3 and figure 1].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-6, 12-13 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haynes as applied to claim 1-4, 8-11 and 15-18 above, and further in view of Neiman et al., (US Publication No. 2003/0154112), (hereinafter Neiman).

Art Unit: 2445

Regarding claims 5, 12 and 19, Haynes further discloses receiving a job submission from the user [Haynes, user jobs, section 4, line 29; the GUI allows dynamic specification of the model, parameter, and job file, section 5, line 37-41]; updating the view of the topology based on the dynamic allocation of the particular subset [Haynes, section 5, lines 88-97].

Haynes does not specifically disclose the job submission comprising at least one parameter; communicating the job submission to a job scheduler for dynamic allocation of a particular subset of the nodes to the job submission.

However, Neiman discloses communicating the job submission to a job scheduler for dynamic allocation of a second subset of the plurality of nodes [Neiman, paragraph 86, lines 20-31], the subset [Neiman, paragraph 86, lines 20-31], comprising a substantially similar set of nodes as the first subset [Neiman, paragraph 86, line 23].

It would have been obvious by one having ordinary skill in the art at the time of the invention to combine the teaching of Haynes and communicating the job submission to a job scheduler for dynamic allocation of another subset of the plurality of nodes as described by Neiman to generate a Graphical User Interface in a HPC environment, which can dynamically process a job submission.

Regarding claims 6, 13 and 20, Haynes-Neiman further discloses communicating an interactive command to the job scheduler to increase a size of the particular subset [Haynes, section 5, lines 88-97]; and

Art Unit: 2445

updating the view of the topology based on the increase [Neiman, paragraph 86, lines 20-31].

Response to Arguments

8. Applicant's arguments filed 05/05/2008 have been fully considered but they are not persuasive.

A – Applicant argues “Haynes would still fail to disclose, teach, or suggest any of the network switches comprising a switching fabric integrated to a card and at least two processors integrated to the card”.

A – Haynes discloses multiple processors and processors are connected to a motherboard [Haynes, figure 1 and section 3].

B – Applicant argues “Therefore, Haynes fails to disclose, teach, or suggest collecting dynamic status information on each of at least a subset of a plurality of nodes”.

B – Haynes discloses collecting dynamic status information and updating the visualization tool [Haynes, section 4, the data is collected, stored and the visualization tool is updated, although not in real time, but it is dynamic in that the tool is updated].

C – Applicant argues “Haynes also necessarily fails to disclose, teach or suggest generating a plurality of graphical elements that convey at least some of the dynamic status information”.

C – Haynes discloses collecting dynamic information [Haynes, section 4, the data is collected, stored and the visualization tool is updated, although not in real time, but it is dynamic in that the tool is updated] and updating the graphical elements [Haynes, section 4, visualization tool]

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Examiner's Note: Examiner has cited particular paragraphs / columns and line numbers in the reference(s) applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the cited passages as taught by the prior art or relied upon by the examiner.

Should applicant amend the claims of the claimed invention, it is respectfully requested that applicant clearly indicate the portion(s) of applicant's specification that support the amended claim language for ascertaining the metes and bounds of applicant's claimed invention

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM J. GOODCHILD whose telephone number is (571)270-1589. The examiner can normally be reached on Monday - Friday / 8:00 AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2445

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WJG
11/07/2008

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2445